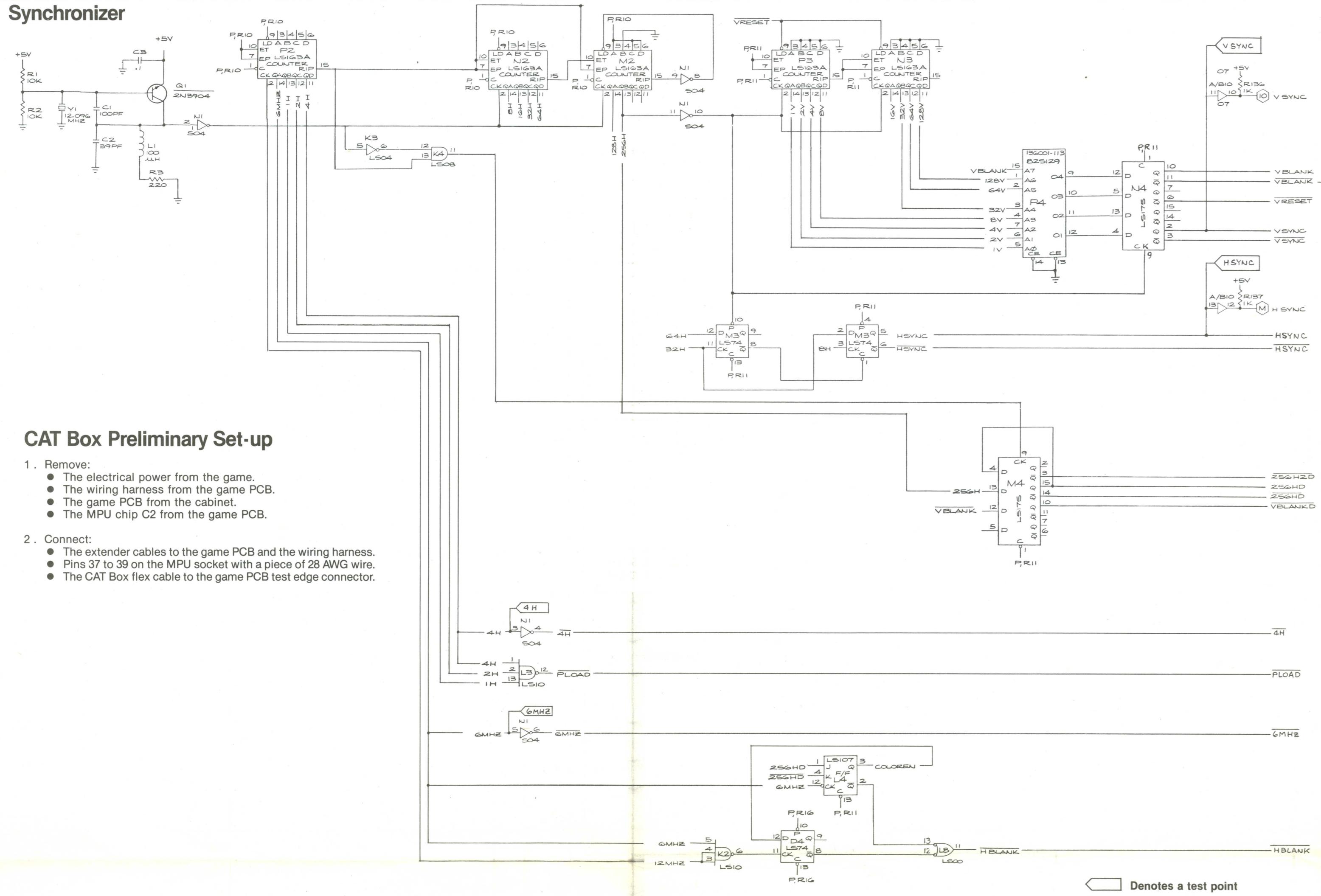


## Synchronizer



## CAT Box Preliminary Set-up

1. Remove:
  - The electrical power from the game.
  - The wiring harness from the game PCB.
  - The game PCB from the cabinet.
  - The MPU chip C2 from the game PCB.
2. Connect:
  - The extender cables to the game PCB and the wiring harness.
  - Pins 37 to 39 on the MPU socket with a piece of 28 AWG wire.
  - The CAT Box flex cable to the game PCB test edge connector.

## Diagnostic Tests

Instruction	Use of Test
1. Hold the slam switch closed, while setting the self-test switch to the on position.	The monitor displays the color hue adjustment pattern of 16 rectangles, as follows. Do not attempt any color hue or brightness adjustments unless you are a qualified color TV technician!
Pale Yellow-Green Light Green Dark Green Navy Blue	Orange Red Black
White Light Blue Purple Royal Blue	Deep Yellow Lime Green Red Black

2. Activate any of the coin switches on the coin door.

3. Set self-test switch to the off position.

A convergence pattern appears with a grid of white dots on a black screen. Do not attempt any convergence adjustments unless you are a qualified color TV technician!

Check attract-mode display and readjust brightness if necessary.

Sheet 1, Side B



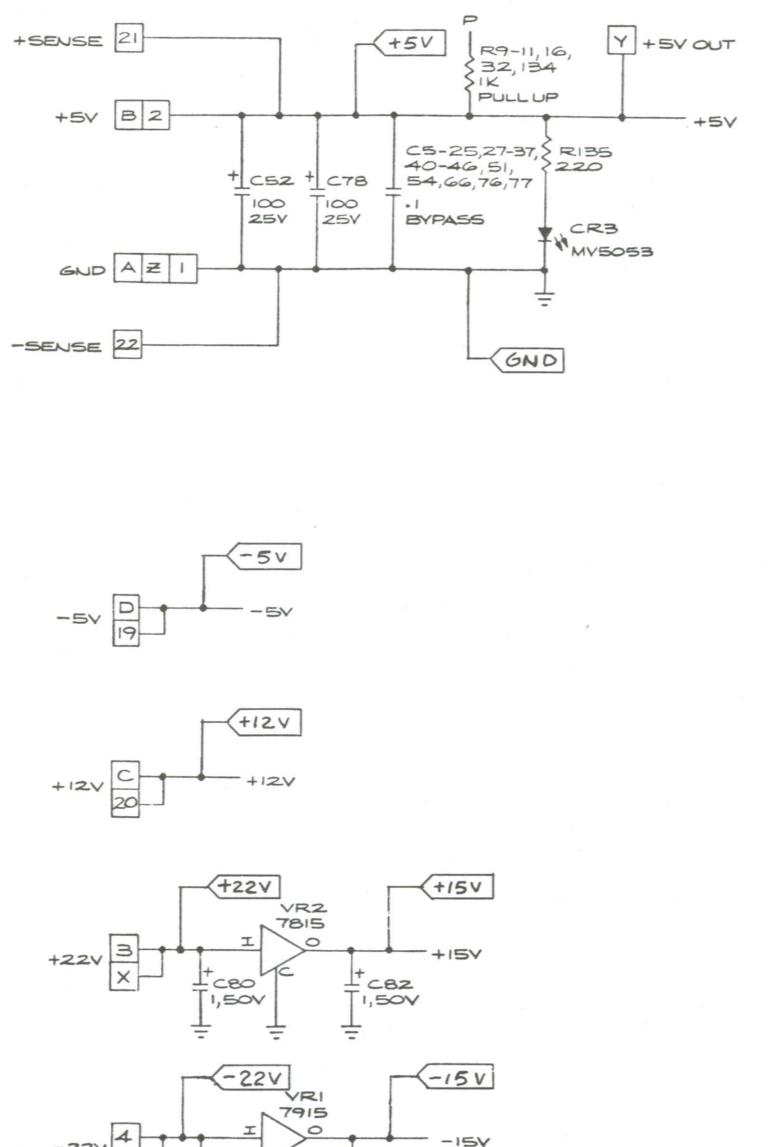
## Centipede™

**Synchronizer**  
**CAT Box Preliminary Set-up**  
**Power Input**  
**Microprocessor**  
**Address Decoder**  
**RAM**  
**ROM**  
**Memory Map**

Section of 037241-01 B

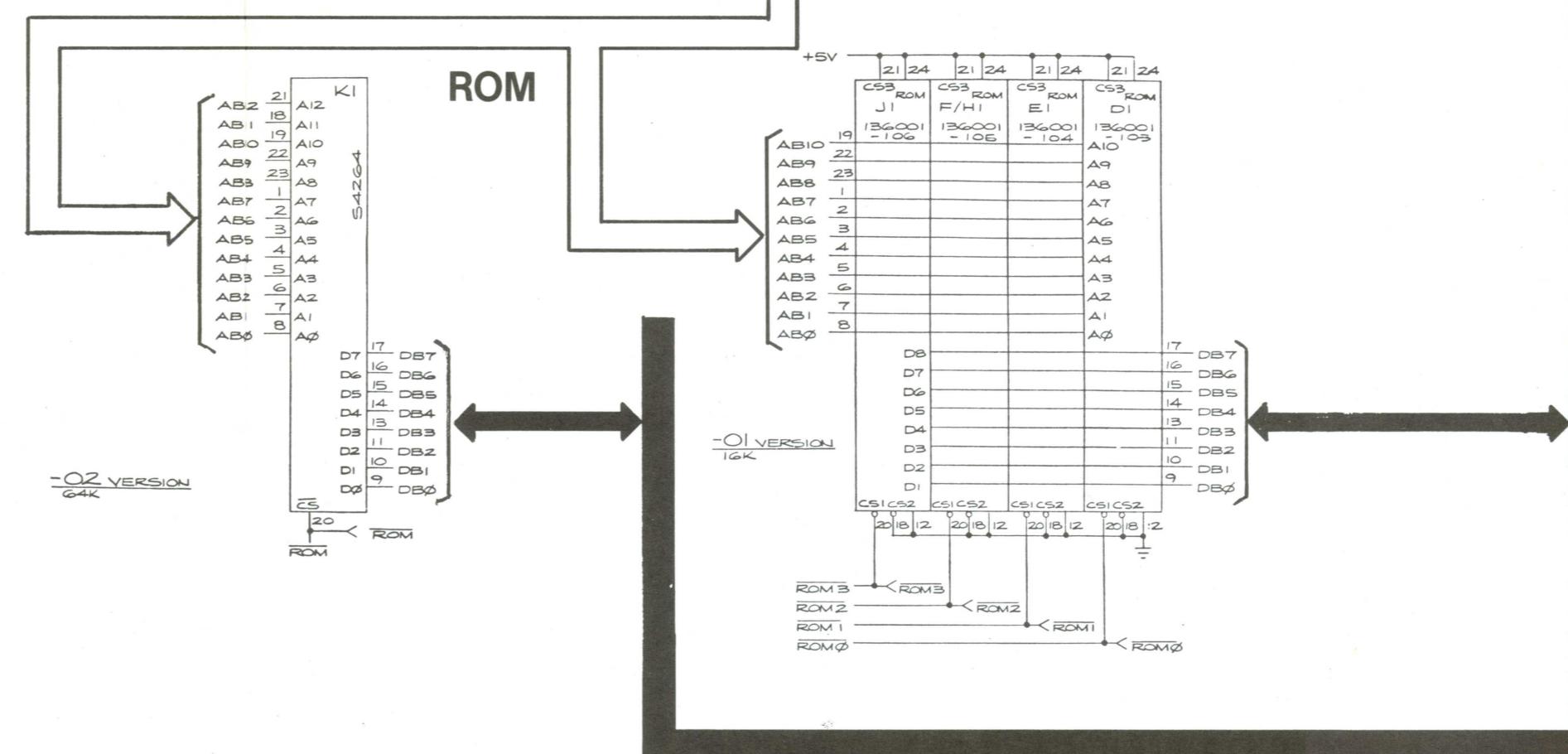
© 1981 Atari, Inc.

## Power Input

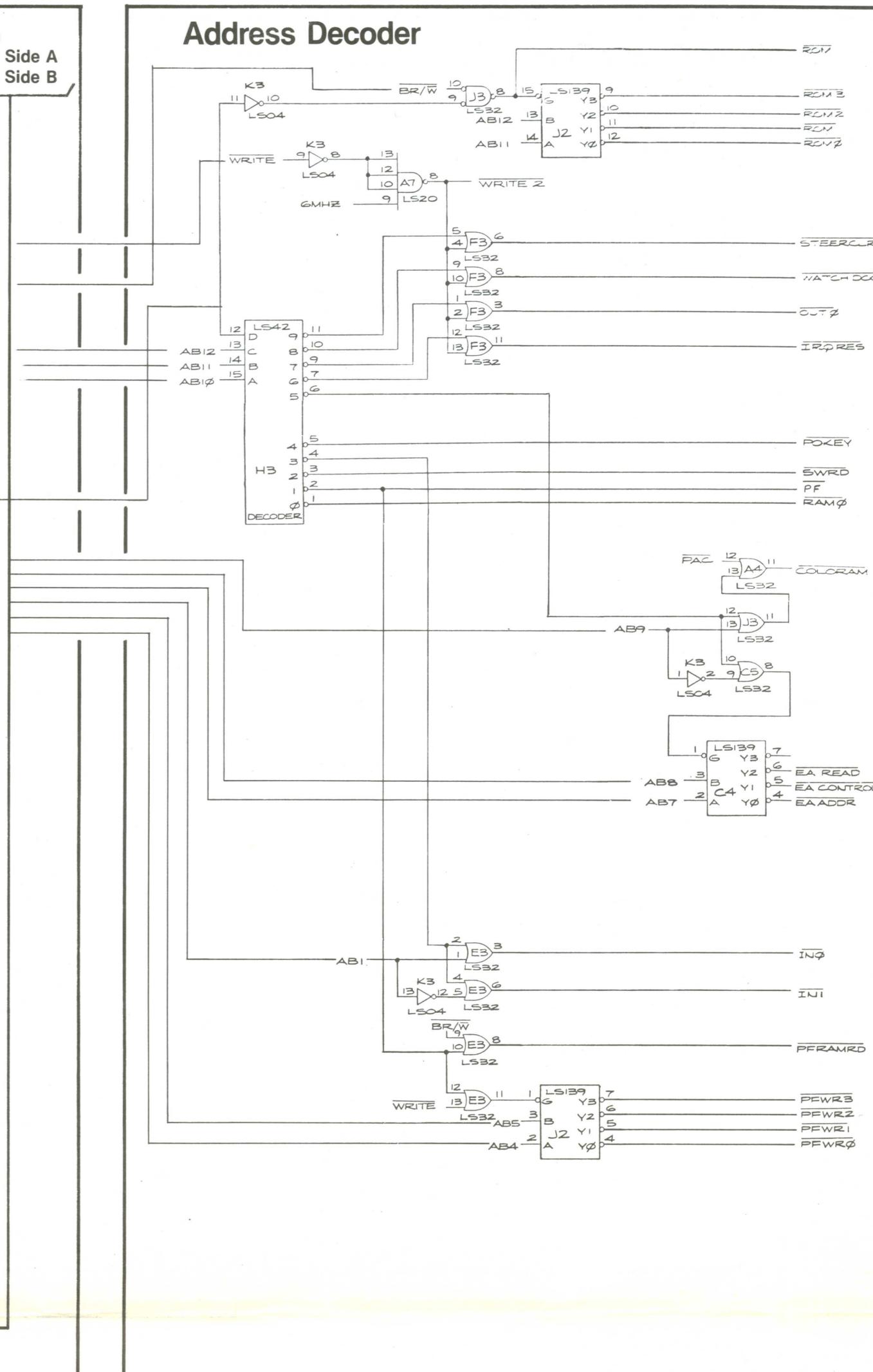


## Testing the RAM

1. Perform the CAT Box preliminary set-up.
2. Set the CAT Box switches as follows:
  - a. Press TESTER RESET
  - b. DBUS SOURCE TO ADDR
  - c. BYTES to 1024
  - d. R/W MODE to (OFF)
  - e. R/W to WRITE
  - f. Key in 0000
  - g. Toggle R/W MODE to SINGLE
  - h. R/W to READ
  - i. Toggle R/W MODE to SINGLE
3. If the CAT Box reads an address that doesn't compare, the COMPARE ERROR LED lights, the ADDRESS/SIGNATURE display shows the failing address location, and the ERROR DATA DISPLAY switch is enabled.
4. If the COMPARE ERROR LED does not light, rekey 0000 and repeat the test with the DBUS SOURCE switch set to ADDR. This ensures that the data bits at address 0000 will go high. If the COMPARE ERROR LED does not light after this step, the RAM is good.



## Address Decoder



## Memory Map

MEMORY MAP		FUNCTION							
HEXA-DECIMAL ADDRESS	R/W	D7	D6	D5	D4	D3	D2	D1	D0
0000-03FF		D	D	D	D	D	D	D	D
0400-07BF	D	D	D	D	D	D	D	D	D
0700-07CF	D	D	D	D	D	D	D	D	D
07D0-07DF	D	D	D	D	D	D	D	D	D
07ED-07EF	D	D	D	D	D	D	D	D	D
07FD-07FF	D	D	D	D	D	D	D	D	D
0800	R	D	D	D	D	D	D	D	D
0801	R	D	D	D	D	D	D	D	D
0C00	R	D	D	D	D	D	D	D	D
0C01	R	R	R	R	R	R	R	R	D
0C02	R	D	D	D	D	D	D	D	D
0C03	R	D	D	D	D	D	D	D	D
1000-100F	R/W	D	D	D	D	D	D	D	D
1404	W	D	D	D	D	D	D	D	D
140C	W	D	D	D	D	D	D	D	D
1600	W	D	D	D	D	D	D	D	D
1680	W	D	D	D	D	D	D	D	D
1700	R	D	D	D	D	D	D	D	D
1800	W								
1C00	W	D							
1C01	W	D							
1C02	W	D							
1C03	W	D							
1C04	W	D							
1C07	W	D							
2000	W								
2400	W								
2000-3FFF	R								